Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Previously presented) A method of identifying a modulator of angiogenesis or vasogenesis comprising:

culturing a plurality of isolated human $CD34^-$ placental stem cells in the presence of a test compound, under conditions in which said placental stem cells form tube-like structures, wherein said placental stem cells are obtained from a human placenta that has been drained of cord blood and perfused to remove residual blood; and

comparing an amount of formation of said tube-like structures, or branching thereof, from said stem cells in the presence of said test compound as compared to a control amount of formation of said tube-like structures, or branching thereof,

wherein if said formation of said tube-like structures, or branching thereof is greater or less than said control amount, the test compound is identified as a modulator of angiogenesis.

2. (Original) The method of claim 1, wherein said stem cells are cultured with a vessel section.

3. (Original) The method of claim 1, wherein said stem cells are cultured with a plurality of tumor cells.

4. (Original) The method of claim 3, wherein said tumor cells are cells of a tumor cell line.

5. (Original) The method of claim 1, wherein said stem cells are additionally cultured in the presence of hydrocortisone, epidermal growth factor, or bovine brain extract.

6. (Original) The method of claim 1, wherein said modulator of angiogenesis is identified as an anti-angiogenic agent.

7. (Original) The method of claim 1, wherein said modulator of angiogenesis is identified as an angiogenic agent.

8. (Original) The method of claim 1, wherein said culturing of a plurality of stem cells in the presence of a test compound is for at least seven days.

9. (Original) The method of claim 1, wherein said culturing of a plurality of stem cells in the presence of a test compound is for at least fourteen days.

10. (Original) The method of claim 1, wherein said stem cells are cultured on a matrix that comprises fibrin.

11. (Original) The method of claim 1, wherein said stem cells are cultured in a physiological gel that comprises fibrin.

12. (Original) The method of claim 1, wherein said stem cells are cultured in a physiological gel that comprises non-denatured collagen.

13. (Previously presented) An *in vitro* method of identifying a modulator of angiogenesis comprising:

(a) culturing a vessel section with a plurality of tumor cells and a test compound, under conditions in which microvessel outgrowth from said vessel section occurs; and

(b) comparing an amount of microvessel outgrowth from said vessel section in the presence of said test compound as compared to a control amount of microvessel outgrowth, wherein said control amount of microvessel outgrowth is an amount of microvessel outgrowth from said vessel in the presence of said tumor cells and in the absence of said test compound,

wherein if said microvessel outgrowth is greater or less than said control amount of microvessel outgrowth, the test compound is identified as a modulator of angiogenesis.

14.-26. (Canceled)

27. (Previously presented) The method of claim 1, wherein said placental stem cells are OCT-4^+, SSEA3^- and SSEA4^-.

28. (Previously presented) The method of claim 1, wherein said placental stem cells are CD10^+, CD29^+, CD44^+, CD54^+, CD90^+, SH2^+, SH3^+, SH4^+, OCT4^+, CD34^-, CD38^-, CD45^-, SSEA3^- and SSEA4^-.

29. (Canceled)

30. (Canceled)

31. (Previously presented) The method of claim 3, wherein said tumor cells are HTB-104 cells, CRL-1973 cells, BT483 cells, Hs578T cells, HTB2 cells, BT20 cells or T47D cells.

32. (Previously presented) The method of claim 13, wherein said tumor cells are HTB-104 cells, CRL-1973 cells, BT483 cells, Hs578T cells, HTB2 cells, BT20 cells or T47D cells.

33. (Previously presented) The method of claim 2, wherein said vessel section is an umbilical cord vessel cross-section.

34. (Currently amended) The method of claim 1, wherein said control amount of ~~microvessel outgrowth~~ formation of tube-like structures is an amount of ~~microvessel outgrowth~~ formation of tube-like structures in the absence of said test compound.

35. (Currently amended) The method of claim 1, wherein said control amount of ~~microvessel outgrowth~~ formation of tube-like structures is an amount of ~~microvessel outgrowth~~ formation of tube-like structures in the presence of a stimulator of angiogenesis.

36. (Previously presented) The method of claim 35, wherein said stimulator of angiogenesis is acidic fibroblast growth factor (aFGF), angiogenin, basic fibroblast growth factor (bFGF), epidermal growth factor, granulocyte colony stimulating factor (GCSF), interleukin 8 (IL-8), placental growth factors (PGF), platelet-derived growth factor (PDGF), scatter factor (hepatocyte growth factor), transforming growth factor alpha (TGFα), tumor necrosis factor alpha (TNFα), vascular endothelial growth factor (VEGF), adenosine, 1-butyryl glycerol, nicotinamide, prostaglandin E1 or prostaglandin E2.